



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,662	11/10/2003	Alfred D. Commins	SST/1367	6146
498	7590	03/09/2006	EXAMINER	
JAMES R. CYPHER 405 14TH STREET SUITE 1607 OAKLAND, CA 94612			HORTON, YVONNE MICHELE	
			ART UNIT	PAPER NUMBER
			3635	
DATE MAILED: 03/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/705,662

Applicant(s)

COMMINS ET AL.

Examiner

Yvonne M. Horton

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 23-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

The declaration of Steven Pryor under 37 CFR 1.132 filed 12/19/05 is insufficient to overcome the rejection of claims 1 and 23-30 based upon the MUELLER, as modified by JOHNSON or CHARLES references as set forth in the last Office action because for the reasons set fourth below in the response to arguments section of the Action.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 23-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,706,626 to MUELLER in view of either US Patent #4,037,381 to CHARLES or US Patent #5,390,466 to JOHNSON et al. In reference to claims 1 and 23, MUELLER discloses the use of a diaphragm (100) including structural panels (110a,b); a plurality of framing members (102a,b) (104,106) and (140) disposed in registry with a proximal side of the structural panel (110a,b); and a plurality of perimeter fasteners (124). MUELLER discloses the basic claimed diaphragm except for explicitly detailing the use of a means for reducing bending of the fasteners. Both brackets and washers are old and very well known in the art for their ability to reduce fasteners from bending as a result of forces being applied thereto. However, both CHARLES and JOHNSON et al. teach that it is known in the art to provide a structural panel with a means, either in the form of brackets (56) in CHARLES or washers (32,35) in JOHNSON et al., for reducing bending of fasteners. Hence, it would have been obvious

Art Unit: 3635

tone having ordinary skill in the art at the time the invention was made to provide the structure of MUELLER with the means for reducing bending of fasteners of either CHARLES or JOHNSON et al. in order to ensure that the panel is structurally sound and capable of resisting forces imposed thereupon. Without additional bracket or washers, when a force is imposed on the structure the fasteners will tend to break or fracture and not be able to maintain its structural integrity. However, brackets and washers provide fasteners with the strength needed to withstand forces imposed thereon. Regarding claim 24, the fasteners are closely spaced. In reference to claim 27, the means for reducing bending is a perimeter edging member (102a,b) (104) (106) (140) disposed near an edge face of the structural panel (110a,b). Regarding claim 28, the perimeter edging member (102a,b) (104) (106) (140) has a first face member (120). In reference to claim 29, the first face (120) is disposed on the distal side of the structural panel (110a,b). Regarding claim 30, the means for reducing bending (102a,b) (104) (106) (140) is made from light gauge sheet metal.

Claims 25 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,706,626 to MUELLER. MUELLER discloses the basic claimed shear panel except for explicitly detail a fastener spacing of 2 inches and except for disclosing that his structural panels are wood. Regarding claim 25, MUELLER discloses a fastener spacing of 4 inches. Although MUELLER does not detail a spacing of 2 inches, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the spacing is selected to depend upon the required rigidity of the connection and the material of the members forming the connection. For instance,

Art Unit: 3635

an all metal panel used for installation in a building known for earthquake exposure might need the fasteners to be spaced closer; whereas if the very same panel were used in a building not known for earthquake exposure would do well with fasteners not so closely spaced. In reference to claim 26, again, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a known material suitable for the use intended as an obvious matter of design choice. A wood panel for use in a low stress imposed residential environment performs well whereas a metal panel performs well in building in environments having large stresses imposed thereon.

### ***Response to Arguments***

Applicant's arguments filed 12/19/05 have been fully considered but they are not persuasive.

Regarding the applicant's argument that there is motivation to combine either JOHNSON or CHARLES with MUELLER just to add an additional washer or bracket because steel walls perform differently than wood walls, the examiner agrees. However, there is nothing in the claim that would make this "means" for reducing bending in a steel wall as opposed to a wood wall. Simply, the claims has been examined in the broadest since, with the requirement being "a means that reduces bending of perimeter fasteners" in general. As noted above, and as clearly set fourth in both JOHNSON and CHARLES, washers and brackets are very old and well known for their use in the art for reducing the ability of a fastener – any fastener, to bend after having been exposed to an or any external force.

Surely, the failure rate of a steel wall as opposed to a wood wall is different, as is the failure rate of a steel fastener as opposed to a plastic or wood fastener because failure is a result of forces imposed thereon. Not every material respond to different forces in the same manner. It is true that typical fasteners are known to be weak and this is why brackets and washers are used in an attempt to impede the weight imposed thereon. So, it is not only the washer or means of reducing bending that are factors, it is also the materials and the force imparted thereon. Thus, without any further structural details of the reducing means, the materials, or the force imparted thereon, the references as stated above, remain readable over the claims as currently cited.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 3635

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yvonne M. Horton  
Art Unit 3635  
03/06/06



Carl D. Friedman  
Supervisory Patent Examiner  
Group 3600